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(54) Title: METHOD AND APPARATUS FOR IMPROVING BOTH LATERAL AND AXIAL RESOLUTION IN OPHTHALMOSCOPY

(57) Abstract: The invention provides a method of optical imaging comprising providing a sample to be imaged, measuring and correcting aberrations associated with the sample using adaptive optics, and imaging the sample by optical coherence tomography. The method can be used to image the fundus of a human eye to provide diagnostic information about retinal pathologies such as macular degeneration, retinitis pigmentosa, glaucoma, or diabetic retinopathy. The invention further provides an apparatus comprising an adaptive optics subsystem and a two-dimensional optical coherence tomography subsystem.